

E220 Series



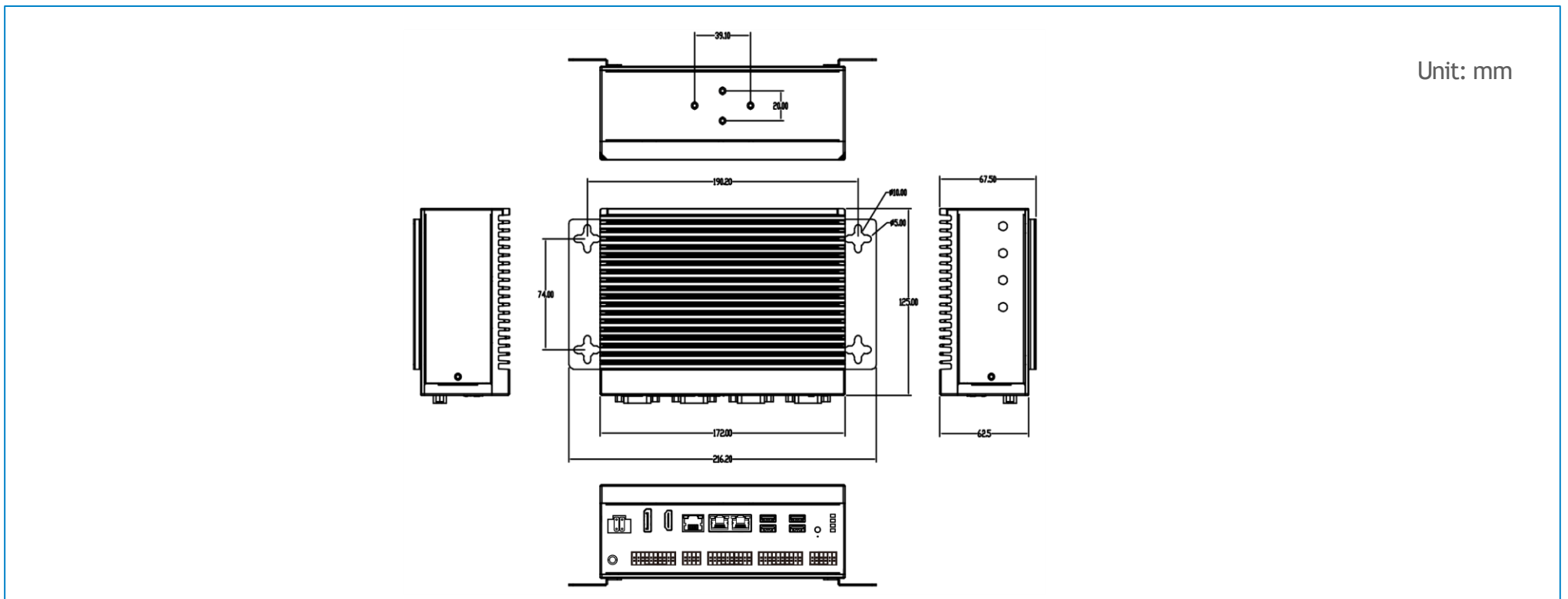
Product Features

- Intel® Alder Lake-N N50/ N97/ N200/ i3-N305
- Single channel DDR5-4800 up to 16GB
- Dual independent display via DP and HDMI
- 3 LAN (2 x Intel i210 , 1 x Intel Realtek RTL8111H)
- 2 USB 3.0, 2 USB 2.0
- 1 RS-232/422/485, 1 RS-232, 4 RS-485
- 16 DI, 16 DO
- 2 CANBus, 2 Encoder
- Support 4G/5G, Wi-Fi module expansion
- DC 9-36V, UPS module is optional
- CE/FCC Class B, ESD 8KV/15KV
- Modular and cable-free design
- 172 x 125 x 62.5mm (L x W x H), support Wall-mounting/ Back-mounting/ Din Rail installation
- Windows 10/11, centos 8, ubuntu 20.04/22.04

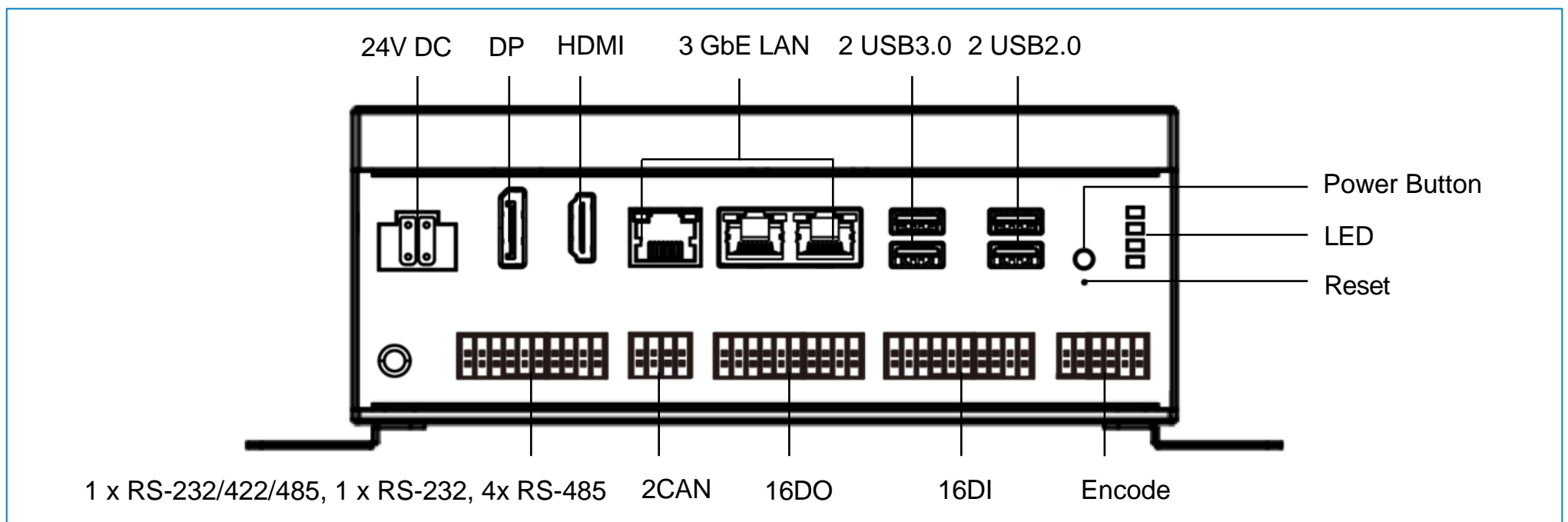
Specification

| | Item | Description |
|--------------------------|-----------------------|---|
| Processor System | CPU | Intel® Alder Lake-N series N50/ N97/ N200/ i3-N305 |
| | TDP | 15W MAX |
| | BIOS | AMI 128Mbit SPI Flash |
| Memory | Technology | DDR5 4800MT/s SO-DIMM |
| | Max Capacity | 16 GB |
| Graphics | Controller | Intel Gen12 UHD Graphics Engines (SoC integrated) |
| | Feature | DX12, Open GL 4.6, Vulkan 1.2 |
| External I/O | DP | 1 x DP 1.4 resolution up to 4096 x 2304 @ 60Hz |
| | HDMI | 1 x HDMI 2.0b resolution up to 4K x 2K @60Hz |
| | Ethernet | 2 x Intel i210, 1 x Realtek RTL8111H GbE LAN |
| | USB | 2 x USB2.0, 2 x USB3.0 |
| | Serial Port | 1 x RS-232/422/485, 1 x RS-232, 4 x RS-485 |
| | CAN | 2 x CANBus 2.0 A/B |
| | DIO | 16 x DI (NPN or PNP, 10K), 16 x DO (NPN, 10K) |
| | Encoder | 2 x Encoder |
| | Power Connector | 4 PIN Phoenix terminal, support remote switch |
| LED & Switch | LED Indicator | Power, SATA, User defined 1, User defined 2 |
| | Power Button | 1 x Power Button |
| | Reset Button | 1 x Reset Button |
| Internal Connectors | M.2 B-Key | 1 x M.2 B-Key 3042/3052 support 4G/5G |
| | M.2 E-Key | 1 x M.2 E-Key 2230 support CNVI |
| | M.2 B-Key | 1 x M.2 B-Key 2280 Sata3.0 |
| | USB 2.0 | 1 x internal USB 2.0 (PIN-Out), 1 x internal USB Type-A |
| | SIM | 1 x Nano SIM |
| Power Supply | Power Input | DC 9~36V |
| | Power management | AT/ATX |
| | Max. consumption | 60W |
| Others | Watchdog | Interrupt, system reset, programmable1~255 min/sec |
| | TPM | TPM 2.0 (Optional) |
| Physical Characteristics | Dimension | 172 x 125 x 62.5mm (L x W x H) |
| | Installation | Wall-mounting/ Back-mounting/ Din Rail |
| Environment | Operating Temperature | 0 ~ 60 °C (32~140°F) |
| | Storage Temperature | -40° C ~ 85° C (-40~185°F) |
| | Operating Humidity | 95% @ 40 °C (Non-condensing) |
| | Storage Humidity | 95% @ 60 °C (Non-condensing) |
| Certification | EMC | CE, FCC |
| Operation System | OS | Windows 10/11, centos 8, ubuntu 20.04/22.04 |

Dimension



Interface



Ordering Information

| Model | CPU | Turbo Frequency | TDP | Core/Thread | LAN | COM | USB3.0 | USB2.0 | DI | DO | CAN | Encode | DP | HDMI | Power Input |
|---------|---------|-----------------|-----|-------------|-----|-----|--------|--------|----|----|-----|--------|----|------|-------------|
| E220-01 | N50 | 3.40 GHz | 6W | 2C | 3 | 6 | 2 | 2 | 16 | 16 | 2 | 2 | 1 | 1 | 9~36V DC |
| E220-02 | N97 | 3.60 GHz | 12W | 4C | 3 | 6 | 2 | 2 | 16 | 16 | 2 | 2 | 1 | 1 | 9~36V DC |
| E220-03 | N200 | 3.70 GHz | 6W | 4C/4T | 3 | 6 | 2 | 2 | 16 | 16 | 2 | 2 | 1 | 1 | 9~36V DC |
| E220-04 | i3-N305 | 3.80 GHz | 15W | 8C/8T | 3 | 6 | 2 | 2 | 16 | 16 | 2 | 2 | 1 | 1 | 9~36V DC |

Optional Accessories

| Part Number | Description |
|------------------|---|
| - | WiFi+BT module M.2 2230 WIFI6 2T2R AW-XB547NF |
| MF0A00000000016 | 5G module, M.2 RM500Q-GL Sub-6 GHz Worldwide (Excluding US) |
| MF0A00000000042 | 5G LTE module, M.2 RM520NGLAA-M20-SGASA, Worldwide |
| MF0A00000000036 | 4G LTE module, M.2 EM05CEFC-128-SGAS, China |
| MF0A00000000066 | 5G LTE module, M.2 RM500UCNVAA-D10-SNADA EMEA, Asia-Pacific |
| 82UPS00000000002 | Internal UPS module |
| - | Din Rail Clip |

OS Support

| Part Number | Description |
|------------------|--|
| AA0A000000000002 | Win10 IoT Ent 2019 LTSC Entry OEM |
| AA0A000000000003 | Win10 IoT Ent 2019 LTSC MultiLang ESD OEI High End |
| AA0A000000000004 | Win10 IoT Ent 2019 LTSC MultiLang ESD OEI Value |
| AA0A000000000005 | Win10 IoT Ent 2021 LTSC Multilang ESD OEI Entry |
| A087 | Win 11 |
| A088 | centos 8 |
| A049 | ubuntu 20.04 (E220) |
| A053 | ubuntu 22.04 (E220) |

Packing List

| Part Number | Description | Quantity |
|------------------|--|----------|
| - | E220 Series Industrial PC | 1 |
| KE0A000000000004 | Round head screws | 6 |
| ZM0A000000000020 | Three-plug power cord | 1 |
| ZM0A000000000058 | 24V 2.5A power adapter with 4 PIN terminal | 1 |
| MC0A000000000019 | Wall-mounting kits (100*37*1mm) | 1 |